



## SEQUENCE LISTING

<110> MANDELKOW ET AL.  
<120> NOVEL TOOLS FOR THE DIAGNOSIS AND TREATMENT OF ALZHEIMER'S DISEASE  
<130> 28384/36668  
<140> US 09/640,737  
<141> 2000-08-17  
<150> US 08/244,603  
<151> 1994-06-03  
<160> 30  
<170> PatentIn version 3.1  
<210> 1  
<211> 441  
<212> PRT  
<213> Homo sapiens  
  
<400> 1

Met Ala Glu Pro Arg Gln Glu Phe Glu Val Met Glu Asp His Ala Gly  
1 5 10 15  
Thr Tyr Gly Leu Gly Asp Arg Lys Asp Gln Gly Gly Tyr Thr Met His  
20 25 30  
Gln Asp Gln Glu Gly Asp Thr Asp Ala Gly Leu Lys Glu Ser Pro Leu  
35 40 45  
Gln Thr Pro Thr Glu Asp Gly Ser Glu Glu Pro Gly Ser Glu Thr Ser  
50 55 60  
Asp Ala Lys Ser Thr Pro Thr Ala Glu Asp Val Thr Ala Pro Leu Val  
65 70 75 80  
Asp Glu Gly Ala Pro Gly Lys Gln Ala Ala Ala Gln Pro His Thr Glu  
85 90 95  
Ile Pro Glu Gly Thr Thr Ala Glu Glu Ala Gly Ile Gly Asp Thr Pro  
100 105 110  
Ser Leu Glu Asp Glu Ala Ala Gly His Val Thr Gln Ala Arg Met Val  
115 120 125  
Ser Lys Ser Lys Asp Gly Thr Gly Ser Asp Asp Lys Lys Ala Lys Gly  
130 135 140  
Ala Asp Gly Lys Thr Lys Ile Ala Thr Pro Arg Gly Ala Ala Pro Pro  
145 150 155 160

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Gly Gln Lys Gly Gln Ala Asn Ala Thr Arg Ile Pro Ala Lys Thr Pro  
165 170 175

Pro Ala Pro Lys Thr Pro Pro Ser Ser Gly Glu Pro Pro Lys Ser Gly  
180 185 190

Asp Arg Ser Gly Tyr Ser Ser Pro Gly Ser Pro Gly Thr Pro Gly Ser  
195 200 205

Arg Ser Arg Thr Pro Ser Leu Pro Thr Pro Pro Thr Arg Glu Pro Lys  
210 215 220

Lys Val Ala Val Val Arg Thr Pro Pro Lys Ser Pro Ser Ser Ala Lys  
225 230 235 240

Ser Arg Leu Gln Thr Ala Pro Val Pro Met Pro Asp Leu Lys Asn Val  
245 250 255

Lys Ser Lys Ile Gly Ser Thr Glu Asn Leu Lys His Gln Pro Gly Gly  
260 265 270

Gly Lys Val Gln Ile Ile Asn Lys Lys Leu Asp Leu Ser Asn Val Gln  
275 280 285

Ser Lys Cys Gly Ser Lys Asp Asn Ile Lys His Val Pro Gly Gly Gly  
290 295 300

Ser Val Gln Ile Val Tyr Lys Pro Val Asp Leu Ser Lys Val Thr Ser  
305 310 315 320

Lys Cys Gly Ser Leu Gly Asn Ile His His Lys Pro Gly Gly Gly Gln  
325 330 335

Val Glu Val Lys Ser Glu Lys Leu Asp Phe Lys Asp Arg Val Gln Ser  
340 345 350

Lys Ile Gly Ser Leu Asp Asn Ile Thr His Val Pro Gly Gly Gly Asn  
355 360 365

Lys Lys Ile Glu Thr His Lys Leu Thr Phe Arg Glu Asn Ala Lys Ala  
370 375 380

Lys Thr Asp His Gly Ala Glu Ile Val Tyr Lys Ser Pro Val Val Ser  
385 390 395 400

Gly Asp Thr Ser Pro Arg His Leu Ser Asn Val Ser Ser Thr Gly Ser  
405 410 415

Ile Asp Met Val Asp Ser Pro Gln Leu Ala Thr Leu Ala Asp Glu Val  
420 425 430

Ser Ala Ser Leu Ala Lys Gln Gly Leu  
435 440

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<220>  
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Lys Glu Ser Pro Leu Gln  
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Tyr Ser Ser Pro Gly Ser Pro  
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Pro Gly Ser Pro Gly Thr  
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Pro Lys Ser Pro Ser Ser  
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Tyr Lys Ser Pro Val Val Ser  
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D6 Gly Asp Thr Ser Pro Arg His  
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Met Val Asp Ser Pro Gln Leu  
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<210> 10

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Pro Leu Gln Thr Pro Thr Glu  
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Leu Lys Glu Ser Pro Leu Gln Thr Pro Thr Glu Asp  
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Ala Lys Ser Thr Pro Thr Ala  
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Ile Gly Asp Thr Pro Ser Leu  
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Lys Ile Ala Thr Pro Arg Gly Ala  
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Ala Pro Lys Thr Pro Pro Ser  
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<210> 17  
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Pro Ala Lys Thr Pro Pro Ala Pro Lys Thr Pro Pro Ser  
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Ser Pro Gly Thr Pro Gly Ser  
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Arg Ser Arg Thr Pro Ser Leu  
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Ser Leu Pro Thr Pro Pro Thr  
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<210> 21  
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Arg Ser Arg Thr Pro Ser Leu Pro Thr Pro Pro Thr  
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Val Val Arg Thr Pro Pro Lys  
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D6  
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Val Val Arg Thr Pro Pro Lys Ser Pro Ser Ser Ala  
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<210> 24  
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Lys Ile Gly Ser Thr Glu Asn Leu Lys  
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<210> 25  
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<400> 25

Lys Cys Gly Ser Lys Asp Asn Ile Lys  
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<210> 26  
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Lys Cys Gly Ser Leu Gly Asn Ile His  
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<210> 27  
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<400> 27

Lys Ile Gly Ser Leu Asp Asn Ile Thr His  
1 5 10

<210> 28  
<211> 23  
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<213> Homo sapiens

<220>  
<223> Q244-E372 of htau23

<400> 28

Ser Ser Pro Gly Ser Pro Gly Thr Pro Gly Ser Arg Ser Arg Thr Pro  
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Ser Leu Pro Thr Pro Pro Thr  
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<210> 29  
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<400> 29

Ser Gly Tyr Ser Ser Pro Gly Ser Pro Gly Thr Pro Gly Ser Arg  
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<210> 30  
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<223> Microtubule binding repeat

<400> 30



sub E3 cont

Val Lys Ser Lys Ile Gly Ser Thr Glu Asn Leu Lys His Gln Pro Gly  
1 5 10 15

Gly Gly Lys